

AN 2004:182885 CAPLUS
 DN 140:243677
 ED Entered STN: 05 Mar 2004
 TI Liquid crystal display and color filter with improved transparency for
 green light
 IN De Keyzer, Gerardus; Yousaf, Taher; Ekkundi, Vadiraj Subbanna; Mudaliar,
 Chandrasekhar Dayal
 PA Ciba Specialty Chemicals Holdings Inc., Switz.
 SO PCT Int. Appl., 22 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004018477	A2	20040304	WO 2003-EP8654	20030805
	WO 2004018477	A3	20040415		
	W: AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
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	AU 2003251692	A1	20040311	AU 2003-251692	20030805
EP	1534714	A2	20050601	EP 2003-792254	20030805
	EP 1534714	B1	20070516		
	R: AT, BE, CH, DE, DK, ES, FR, IE, SI, LT, LV, FI, RO, MK	GB, GR, IT, LI, LU, NL, SE, MC, PT, CY, AL, TR, BG, CZ, EE, HU, SK			
	CN 1675216	A	20050928	CN 2003-819444	20030805
	CN 100360535	C	20080109		
	JP 2006510039	T	20060323	JP 2004-530083	20030805
	JP 4468173	B2	20100526		
	AT 362477	T	20070615	AT 2003-792254	20030805
	TW 273283	B	20070211	TW 2003-122243	20030813
	US 20060060829	A1	20060323	US 2005-523742	20050202
	US 7582230	B2	20090901		
	MX 2005001648	A	20050419	MX 2005-1648	20050211
	IN 2005CN00376	A	20070406	IN 2005-CN376	20050311
	IN 227194	A1	20090213		
PRAI	IN 2002-MA600	A	20020814		
	WO 2003-EP8654	W	20030805		

CLASS	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	WO 2004018477	IPCI	C07D0487-22 [ICM,7]; C07D0487-00 [ICM,7,C*]; G02F0001-13 [ICS,7]; C09B0047-04 [ICS,7]; C09B0067-00 [ICS,7]; G02B0005-20 [ICS,7]
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AU 2003251692	IPCI	C07D0487-22 [ICM,7]; C07D0487-00 [ICM,7,C*]; G02F00001-13 [ICS,7]; C09B0047-04 [ICS,7]; C09B0067-00 [ICS,7]; G02B0005-20 [ICS,7]
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	ECLA	F02M059/30; C07D487/22; C09B047/067E; G02B005/22D; G02F001/1335F2; M07D487:22+259E+209C+209C+209C; M07D487:22
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 G02F001/1335F2; M07D487:22+259E+209C+209C+209C;
 M07D487:22

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 M07D487:22

FTERM 2H048/BA02; 2H048/BA45; 2H048/BA53; 2H048/BB02;
 2H048/BB42; 2H048/CA04; 2H048/CA14; 2H048/CA19;
 2H091/FA02X; 2H091/FA02X; 2H091/FA02Z; 2H091/FB02;
 2H091/FB12; 2H091/FC10; 2H091/KA10; 2H091/LA15;
 4C050/PA12; 4C050/PA12

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TW 273283 IPCI G02B0005-22 [I,C]; G02B0005-23 [I,A]; G02F0001-13
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 [I,C]; F21V0009-08 [I,A]

NCL 252/586.000; 252/582.000; 250/225.000; 252/519.210;
 359/577.000; 540/139.000; 540/140.000

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 M07D487:22

IN 2005CN00376 IPCI C07D0487-22 [ICM,7]; C07D0487-00 [ICM,7,C*]
 ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 140:243677

AB The invention relates to novel liquid crystal displays comprising a broad
 backlight emission around 530 nm and a green color filter containing a
 phthalocyanine colorant, most adequately tetrahydroxy- or
 tetraalkoxy-substituted but lacking solubilizing groups. The purpose of
 the invention is to provide a liquid crystal display having better
 transmittance for green light and efficient absorption for red light
 (particularly from 600-620 nm), with a steep slope between green and red
 as well as good light stability.

ST improved transparency green light color filter liq crystal display
IT Liquid crystal displays
 Optical filters
 (liquid crystal display and color filter with improved transparency for
 green light)

IT 227101-11-3P 667865-45-4P
 RL: DEV (Device component use); PRP (Properties); SPN (Synthetic
 preparation); PREP (Preparation); USES (Uses)
 (liquid crystal display and color filter with improved transparency for
 green light)

IT 20468-22-8P
 RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or
 engineered material use); PREP (Preparation); USES (Uses)
 (liquid crystal display and color filter with improved transparency for
 green light)

IT 57-13-6, Urea, reactions 98-95-3, Nitrobenzene, reactions 7447-39-4,
 Copper(II) chloride, reactions 86312-75-6 206995-48-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of phthalocyanine colorant for liquid crystal display)

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
UPOS.G Date last citing reference entered STN: 17 Mar 2010

OS.G CAPLUS 2006:36987; 2005:824495; 2007:175516
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE CITED REFERENCES

- (1) Anon; WO 0204563 A1 CAPLUS
- (2) Anon; EP 0519423 A2 CAPLUS
- (3) Anon; EP 0531106 A1 CAPLUS
- (4) Anon; EP 0896327 A1 CAPLUS
- (5) Anon; EP 0965874 A2 CAPLUS
- (6) Anon; EP 1168048 A1 CAPLUS
- (7) Anon; WO 9526381 A1 CAPLUS

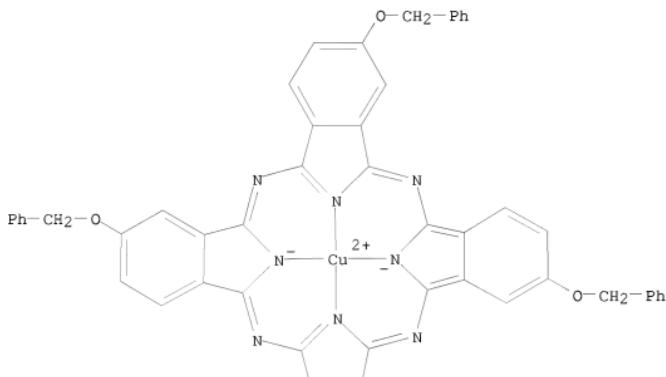
IT 227101-11-3P 667865-45-4P

RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(liquid crystal display and color filter with improved transparency for green light)

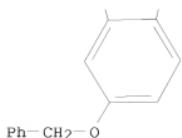
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NAME)

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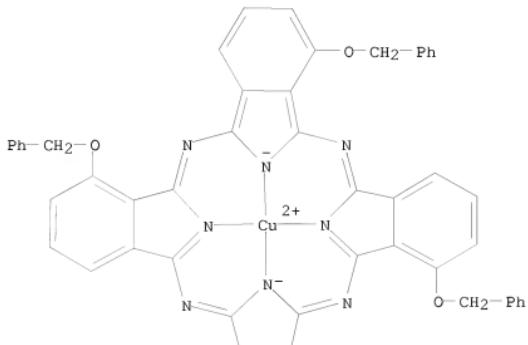


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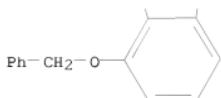


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CN Copper, [1,8,15,22-tetrakis(phenylmethoxy)-29H,31H-phthalocyaninato(2-)-
κN29,κN30,κN31,κN32]-, (SP-4-1)- (9CI) (CA INDEX
NAME)

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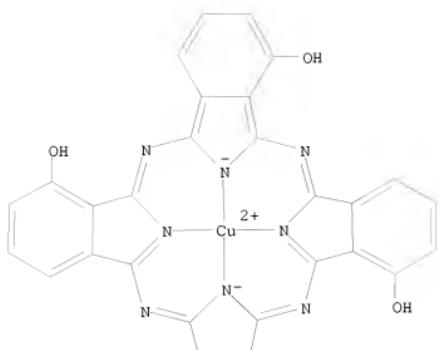


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IT 20468-22-8P
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or
engineered material use); PREP (Preparation); USES (Uses)
(liquid crystal display and color filter with improved transparency for
green light)
RN 20468-22-8 CAPLUS
CN Copper, [29H,31H-phthalocyanine-1,8,15,22-tetrolato(2-)-
κN29,κN30,κN31,κN32]-, (SP-4-1)- (9CI) (CA INDEX
NAME)

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